UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

27365 7500 05/13/2008 SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH

MINNEAPOLIS, MN 55402-3244

EXAMINER
RUILAND WALLIS, MICHAEL
ART UNIT PAPER NUMBER
2816

DATE MAILED: 05/13/2008

	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
	10/824,866 04/15/2004		Hakam D. Hussein	S104.12-0095/STL11730	7077		
TITLE OF INVENTION: INRUSH CURRENT CONTROLLER							

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1440
 \$300
 \$0
 \$1740
 08/13/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or transr ig the Pa ierwise ii	mitting the ISSU stent, advance or n Block 1, by (a	TE FEE and PUBLIC ders and notification i) specifying a new o						
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
27365 7590 05/13/2008 SEAGATE TECHNOLOGY LLC C/O WESTM CHAMPLIN & KELLY, P.A. SUITE 1400				IAN		Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.				
	VENUE SOUTH , MN 55402-3244								(Depositor)	's name)
min ti tanti Olilo	,								(Si	gnature)
					L					(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION N	ŧО.
10/824,866	04/15/2004			Hakam D. Hussei	in		S104.	12-0095/STL11730	7077	
TITLE OF INVENTION:										
APPLN, TYPE	SMALL ENTITY	ISSU	Æ FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSU	S FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO		\$1440	\$300		\$0		\$1740	08/13/2008	
EXAM	INER	A	RT UNIT	CLASS-SUBCLASS	S					
RUTLAND WAL	LIS, MICHAEL		2836	307-135000						
"Fee Address" indi PTO/SB/47; Rev 03-0: Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha W122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident in 37 CFR 3.11. Comp	nge of Co " Indicati ed. Use o	orrespondence on form of a Customer PRINTED ON	(I) the names of or agents OR, alter (2) the name of a registered attorner 2 registered patent listed, no name with the PATENT (print of the patent).	up to rnativ single y or a t attor ill be or typ the pe	e firm (having as a gent) and the nam neys or agents. If printed. e) atent. If an assign assignment.	memb es of u no nam	er a 2	ocument has been fi	
Please check the appropri	ate assignee category or	categorie	es (will not be pr	inted on the patent):	۵	Individual 🚨 Co	orporati	on or other private gro	up entity 🚨 Gover	nment
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				4b. Payment of Fe(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoint Account Number (enclose an extra copy of this form).						
	SMALL ENTITY state	is. See 37						TITY status. Sec 37 CF		
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) wi tes Paten	II not be accepted t and Trademark	from anyone other t Office.	han ti	ne applicant; a regi	stered :	ittorney or agent; or th	e assignee or other p	arty in
Authorized Signature						Date				
Typed or printed name						Registration N				
This collection of informs an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V. Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu- inginia 22313-1450. DC 13-1450.	FR 1.311 U.S.C. 1 USPTO rden, sho ONOT SI	I. The informatic 22 and 37 CFR Time will vary uld be sent to the END FEES OR	on is required to obtain 1.14. This collection depending upon the Echief Information COMPLETED FORM	n or n is est indiv Office IS TO	etain a benefit by t imated to take 12 i idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he publ minutes mment Traden i. SENI	ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner I	by the USPTO to pr g gathering, preparin ne you require to co urtment of Commerc for Patents, P.O. Box	ocess) ng, and mplete e, P.O. t 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,866	04/15/2004	Hakam D. Hussein	S104.12-0095/STL11730	7077
27365 75	90 05/13/2008	EXAMINER		
SEAGATE TEC	HNOLOGY LLC C/0	RUILAND WALLIS, MICHAEL		
CHAMPLIN & KI	ELLY, P.A.	ART UNIT	PAPER NUMBER	
SUITE 1400		2016		

900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244

DATE MAILED: 05/13/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 515 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 515 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/824.866	HUSSEIN ET AL.	
Examiner	Art Unit	
MICHAEL RUTLAND WALLIS	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application for included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.133 and MPEP 1308.

- This communication is responsive to 1-12.
- The allowed claim(s) is/are 1-12 and 26-38.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Application/Control Number: 10/824,866

Art Unit: 2836

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Volkmann (Reg. No. 60,349) on Tuesday, April 29, 2008.

In claim 26 line 5 "associated with" has been changed to - - connection of - -.

In claim 26 line 6 - - and a third contact for connecting to a second power supply contact of the power source - - has been added after the term "source;".

Response to Arguments

Applicant's arguments, filed 3/26/2008, have been fully considered and are persuasive. The previous rejection has been withdrawn.

Allowable Subject Matter

Application/Control Number: 10/824,866

Art Unit: 2836

Claims 1-12 and 26-38 are allowed. The following is an examiner's statement of reasons for allowance:

With respect to claims 1-12 Willis teaches an inrush current controller for a device, Willis does not teach the impedance control circuit includes a first timer which is triggered by the device being plugged into the source of energization and the logic output from the source enabling a limited inrush at the current input during a second time interval controlled by a second timer. At least this further limitation is not taught or rendered obvious by the prior art of record.

With respect to claim 26-32 Willis teaches a controller for a device and a controller, however does not teach impedance control circuit comprises a first timer coupled to the current input as claimed wherein the first timer is enables when a connection is made between the connector and the power source in combination with the impedance control circuit enabling a limited amount of current at the current input based on the logic output during a second time interval. At least this further limitation is not taught or rendered obvious by the prior art of record.

With respect to claim 33-38 Willis teaches a controller for a device and a controller, however does not teach impedance control circuit comprises a first timer configured to force the impedance off during a first time interval controlled by the first timer in combination with a second timer configured to provide a current limiting output during a second timer interval. At least this further limitation is not taught or rendered obvious by the prior art of record.

Application/Control Number: 10/824,866 Page 4

Art Unit: 2836

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/824,866 Page 5

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Sherry/ Supervisory Patent Examiner, Art Unit 2836

MRW